NON-PUBLIC?: N
ACCESSION #: 9403180052
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Vogtle Electric Generating Plant - Unit 1 PAGE: 1 OF 4

DOCKET NUMBER: 05000424

TITLE: REACTOR TRIP/SAFETY INJECTION DUE TO FALSE PRESSURIZER LOW PRESSURE SIGNAL
EVENT DATE: 02/02/94 LER #: 94-001-00 REPORT DATE: 02/21/94

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: Mehdi Sheibani, Nuclear Safety and Compliance TELEPHONE: (706) 826-3209

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT:

On February 2, 1994, personnel were replacing a pressurizer pressure transmitter in the containment building. During the work, the transmitter swung on one of its mounting bolts and impacted the handle of the isolation valve for its sensing line, causing the valve to open enough to momentarily vent pressure from the sensing line. This sensing line is shared with another pressure transmitter. The momentary venting of the sensing line caused the second pressure transmitter to sense a false low pressure, which completed a two out of four logic for initiating a reactor trip and a safety injection (SI), at 0557 EST. Within seconds, the technician performing the work closed the isolation valve. Control room operators responded to the reactor trip and SI using the emergency operating procedures (EOPs) and the SI signal was reset at 0607 EST. A Notification of Unusual Event (NOUE) was declared at 0610 EST, due to the safety injection into the reactor vessel. The unit was

stabilized and normal operation resumed in Mode 3 (hot standby). The NOUE was terminated at 0750 EST.

The cause of this event was a cognitive personnel error by the technician involved when he lost physical control of the pressure transmitter, such that it swung and bumped open the instrument isolation valve, initiating the sequence of events. Appropriate personnel are being briefed regarding this event, with emphasis being placed on attention to detail when performing work on critical plant components.

END OF ABSTRACT

A. REQUIREMENT FOR REPORT

This report is required per 10 CFR 50.73 (a)(2)(iv) because unplanned actuations of the reactor protection system and an engineered safety feature (safety injection) occurred.

B. UNIT STATUS AT TIME OF EVENT

At the time of this event, Unit 1 was operating in Mode 1 (power operation) at 100 percent of rated thermal power. Other than that described herein, there was no inoperable equipment that contributed to the occurrence of this event.

C. DESCRIPTION OF EVENT

On February 2, 1994, personnel were replacing a pressurizer pressure

transmitter, 1PT-0457, in the containment building. After a technician had removed the connecting tubing and three of the four mounting bolts, the transmitter pivoted on the fourth bolt, swung downward and impacted the handle of its isolation valve. The isolation valve opened enough to vent pressure from the sensing line. This sensing line is shared with another pressurizer pressure transmitter, 1PT-0458, The momentary venting of the sensing line caused 1PT-0458 to sense a false low pressure. Because two of four instruments were now either out of service or detecting low pressure, the logic was complete to initiate a reactor trip and a safety injection (SI), which occurred at 0557 EST. Within seconds, the technician closed the isolation valve. The auxiliary feedwater (AFW) system actuated as designed to provide feedwater to the steam generators and the emergency core cooling system (ECCS) initiated flow to the reactor vessel as expected. In the control room, operators responded to the reactor trip and SI using the emergency operating procedures (EOPs)

and the SI signal was reset at 0607 EST. A Notification of Unusual Event (NOUE) was declared at 0610 EST, due to the safety injection into the reactor vessel. The unit was stabilized and normal operation resumed in Mode 3 (hot standby). The NOUE was terminated at 0750 EST.

D. CAUSE OF EVENT

The cause of this event was a cognitive personnel error by the technician involved when he lost physical control of 1PT-0457, such that it swung and bumped open the instrument isolation valve, initiating the sequence of events. There were no unusual characteristics of the work location that contributed to the occurrence of this error by the Georgia Power Company technician involved.

Contributing to the occurrence of this event was an instrument drift problem that necessitated calibration and replacement of 1PT-0457. Another contributing factor is the design that has two pressurizer pressure transmitters sharing a common sensing line.

E. ANALYSIS OF EVENT

The reactor trip and SI occurred as designed when the false low pressurizer pressure was detected. The AFW system actuated as expected and control room personnel responded appropriately to stabilize the unit. The high pressure SI portion of the ECCS injected approximately 1500 gallons of borated water and the highest recorded reactor coolant system (RCS) pressure during the event was 2315 psig. Power operated relief valve 1PV-0455A opened to maintain RCS pressure well within the pressurizer code safety valve setpoint of 2485 psig. These actions ensure that an appropriate response would have occurred had a low RCS pressure condition actually existed. Based on these considerations, there was no adverse effect on plant safety or on the health and safety of the public as a result of this event.

F. CORRECTIVE ACTIONS

1) Appropriate personnel will be briefed during 1994 continuing training regarding the details of this event, with emphasis being placed on planning for the unexpected and displaying a consistent level of concern when performing work on critical plant components.

2) An engineering review of pressurizer pressure transmitter problems has been ongoing since November 1, 1993. Recommendations for corrective actions are expected by March 1, 1994.

3) A safety and licensing review will be performed to evaluate the possible use of the test-in-bypass system for corrective maintenance on certain instruments. Recommendations will be made by March 1, 1994.

G. ADDITIONAL INFORMATION

1) Failed Components:
None

2) Previous Similar Events:
None

3) Energy Industry Identification System Code:
Reactor Coolant System - AB
Auxiliary Feedwater System - BA
Safety Injection System - BQ

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C. K. McCoy Georgia Power
Vice President, Nuclear the southern electric system
Vogtle Project

February 21, 1994

LCV-0300

Docket Nos. 50-424

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

VOGTLE ELECTRIC GENERATING PLANT
LICENSEE EVENT REPORT

REACTOR TRIP/SAFETY INJECTION DUE TO FALSE
PRESSURIZER LOW PRESSURE SIGNAL

In accordance with the requirements of 10 CFR 50.73, Georgia Power Company submits the enclosed report related to an event which occurred on February 2, 1994.

Sincerely,

C. K. McCoy

CKM/HWM

Enclosure: LER 50-424/1994-001

cc: Georgia Power Company
Mr. J. B. Beasley, Jr.
Mr. M. Sheibani
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebneter, Regional Administrator
Mr. D. S. Hood, Licensing Project Manager, NRR
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

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